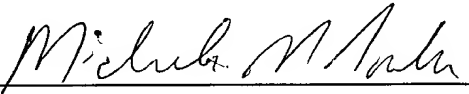Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date: <u>December 11, 2001</u>

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"Version of th Specification with Markings to Show Changes Made"

Page 22, please replace the fourth paragraph with the following:

--The ribozymes are hammerhead (Riddell *et al.,* 1996) structures of the following general structure:

Helix I   Helix II   Helix III

5'-NNNNNNNN ~   CUGAUGAGGCCGAAAGGCCGAA   ~ NNNNNNNN ~

(SEQ ID NO: 15)--

Please replace the paragraph bridging pages 22-23 with the following:

--The cleavage sites, targeting *gag* and *pol*, with the essential GUX triplet (where X is any nucleotide base) are as follows:

GAG 1   5' UAGUAAGAAUGUAUAGCCCUAC (SEQ ID NO: 16)

GAG 2   5' AACCCAGAUUGUAAGACUAUUU (SEQ ID NO: 17)

GAG 3   5' UGUUUCAAUUGUGGCAAAGAAG (SEQ ID NO: 18)

GAG 4   5' AAAAAGGGCUGUUGGAAAUGUG (SEQ ID NO: 19)

POL 1   5' ACGACCCCUCGUCACAAUAAAG (SEQ ID NO: 20)

POL 2   5' GGAAUUGGAGGUUUUAUCAAAG (SEQ ID NO: 21)

POL 3   5' AUAUUUUUCAGUUCCCUUAGAU (SEQ ID NO. 22)

POL 4   5' UGGAUGAUUUGUAUGUAGGAUC (SEQ ID NO: 23)

POL 5   5' CUUUGGAUGGGUUAUGAACUCC (SEQ ID NO: 24)

POL 6   5' CAGCUGGACUGUCAAUGACAUA (SEQ ID NO: 25)

POL 7   5' AACUUUCUAUGUAGAUGGGGCA (SEQ ID NO: 26)

POL 8   5' AAGGCCGCCUGUUGGUGGGCAG (SEQ ID NO: 27)

POL 9   5' UAAGACAGCAGUACAAAUGGCA (SEQ ID NO: 28)—

Page 23, please replace the second full paragraph with the following:

--The HCMV/HIV-1 hybrid 3' LTR is created by recombinant PCR with three PCR primers (Figure 2). The first round of PCR is performed with RIB1 and RIB2 using pH4 (Kim *et al.,* 1998) as the template to amplify the HIV-1 HXB2 sequence 8900-9123. The second round of PCR makes the junction between the 4' end of the HIV-1 U3 and

the HCMV promoter by amplifying the hybrid 5' LTR from pH4. The PCR product from the first PCR reaction and RIB3 serves as the 5' primer and 3' primer respectively.

RIB1:   5' CAGCTGCTCGAGCAGCTGAAGCTTGCATGC 3' <u>(SEQ ID NO: 29)</u>

RIB2:   5' GTAAGTTATGTAACGGACGATATCTTGTCTTCTT 3' <u>(SEQ ID NO: 30)</u>

RIB3:   5' CGCATAGTCGACGGGCCCGCCACTGCTAGAGATTTTC 3' <u>(SEQ ID NO: 31)</u>--

Please replace the paragraph bridging pages 27 and 28 with the following:

--Egs 1/1A (SEQ ID NO. 5)

(SEQ ID NO: 5) 5'-tcgagcccgggggatgacgtcatcgacttcgaaggttcgaatccttctactgccaccattttt

cgggcccctactgcagtagctgaagcttccaagcttaggaagatgacggtggtaaaaaa

ctctacgtcatcgacttcgaaggttcgaatccttccctgtccaccagtcgacc-3'

gagatgcagtagctgaagcttccaagcttaggaagggacaggtggtcagctggagct-5' (SEQ ID NO: 32)

Egs 2/2A (SEQ ID NO. 6)

(SEQ ID NO. 6) 5'-tcgagtattacgtcatcgacttcgaaggttcgaatccttctagattcaccatttttaggaacg

cataatgcagtagctgaagcttccaagcttaggaagtactaagtggtaaaaaatccttgc

tcatcgacttcgaaggttcgaatccttccagttccaccagtcgacc-3'

agtagctgaagcttccaagcttaggaaggtcaaggtggtcagctggagct-5' (SEQ ID NO. 33)

Egs 3/3A (SEQ ID NO. 7)

(SEQ ID NO. 7) 5'-tcgaggccaacgtcatcgacttcgaaggttcgaatccttctcttcccaccatttttttcc

ccggttgcagtagctgaagcttccaagcttaggaagagaagggtggtaaaaaaaagg

ctgaacgtcatcgacttcgaaggttcgaatccttctgctgtcaccagtcgacc-3'

gacttgcagtagctgaagcttccaagcttaggaagacgacagtggtcagctggagct-5' (SEQ ID NO. 34)

Egs 4/4 (SEQ ID NO. 8)

(SEQ ID NO. 8) 5'-tcgagggctacgtcatcgacttcgaaggttcgaatccttcttgcttcaccattttt

cccgatgcagtagctgaatgcttccaagcttaggaagaacgaagtggtaaaaaa

ctgaacgtcatcgacttcgaaggttcgaatccttctgctgtcaccagtcgacc-3'

gacttgcagtagctgaagcttccaagcttaggaagacgacagtggtcagctggagct-5' (SEQ ID NO. 35)

Egs 5/5A (SEQ ID NO. 9)

(SEQ ID NO. 8) 5'-tcgagtataacgtcatcgacttcgaaggttcgaatccttcaccggtcaccattttttata

               catattgcagtagctgaagcttccaagcttaggaagtggccagtggtaaaaaaatat

acgtcatcgacttcgaaggttcgaatccttcttcttacaccagtcgacc-3'

tgcagtagctgaagcttccaagcttaggaagaagaatgtggtcagctggagct-5' (SEQ ID NO. 36)

Egs 6/6A (SEQ ID NO. 10)

(SEQ ID NO. 10) 5'-tcgaggtacacgtcatcgacttcgaaggttcgaatccttcgtagttcaccattttttgtgc

                ccatgtgcagtagctgaagcttccaagcttaggaagcatcaagtggtaaaaaacacg

acgtcatcgacttcgaaggttcgaatccttctaggcccaccagtcgacgcatgcc-3'

tgcagtagctgaagcttccaagcttaggaagatccgggtggtcagctgcgtacggagct-5' (SEQ ID NO. 37)—

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